

REMARKS

Claims 1-3 and 6-15 are pending in the application. Claims 1, 8, and 13 have been amended and claims 16-21 have been added, leaving claims 1-3 and 6-21 for consideration upon entry of the present Amendment. Support for the Amendment can be found at page 6, line 17 and page 5, line 22 to page 6, line 3. Applicants respectfully request reconsideration in view of the amendment and remarks submitted herewith.

Claim 8 stands rejected under 35 U.S.C. §102(e) as being anticipated by Hirano et al. (US 6,292,241) ("Hirano"). Claim 8 stands rejected under 35 U.S.C. §102(e) as being anticipated by Shintani et al. (US 5,978,056) ("Shintani"). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the * * * claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claim 8 includes the following limitation: "electrode and said thickness of said back-surface electrode is greater than 200 Å and less than or equal to 1500 Å." There is nothing in Shintani that disclose such a limitation. Hirano discloses in Figure 3A and the corresponding description (see column 5, line 29) that the thickness of the Mo layer constituting the back-surface electrode is 20 nm (200 Å). However, Hirano makes no reference to the feature of forming the layer at a thickness greater than 200 Å and less than or equal to 1500 Å. Accordingly, Hirano and Shintani do not anticipate claim 8. Applicants respectfully request that the rejections be withdrawn.

Claims 1, 6, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimada et al. (U.S. 5,182,620) ("Shimada '620") in view of Shimada et al. (U.S. 5,877,832) ("Shimada '832"). For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5

U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

The Examiner has combined Shimada '620 and Shimada '832 and asserts that those two references teach all of the claimed limitations. Claims 1, 6, and 12, as amended, include the following limitations: "and said thickness of said back-surface electrode is greater than 200 Å and less than or equal to 1500 Å." There is no disclosure in either of the Shimada references as to the thickness of the back-surface electrode. Accordingly, Shimada '620 and Shimada '832 do not teach or suggest this limitation. Applicants respectfully request that the rejection be withdrawn.

Claims 2, 3, 7, 13, 14, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shimada '620 in view of Shimada '832 and further in view of Hirano. Claims 2, 3, 7, 13, 14, and 15 all include the limitation: "and said thickness of said back-surface electrode is greater than 200 Å and less than or equal to 1500 Å." As explained above, neither Shimada reference has any disclosure regarding the thickness of the back-surface electrode. In addition, as explained above, Hirano discloses in Figure 3A and the corresponding description (see column 5, line 29) that the thickness of the Mo layer constituting the back-surface electrode is 20 nm (200 Å). However, Hirano makes no reference to the feature of forming the layer at a thickness greater than 200 Å and less than or equal to 1500 Å. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Shintani, as applied to claim 8, and further in view of Ishii et al. (US 5,566,010). Claim 9 includes all of the limitations of claim 8. Neither Shintani nor Ishii disclose the following limitation: "and said thickness of said back-surface electrode is greater than 200 Å and less than or equal to 1500 Å." Accordingly, Applicants respectfully request that the rejection be withdrawn.

Applicants have also added new claims 16-21. These claims include limitations stating that the back-surface electrode is made of a titanium, the display electrode is made of aluminum, and the display electrode is in (111) orientation state. Because titanium is of a hexagonal crystal system, titanium is very compatible, with respect to crystal lattice structure, with aluminum, which is of a centroid cubic system. Accordingly, when using titanium for the back-surface electrode, aluminum is readily placed in (111) orientation state, thereby preventing formation of protrusions in the surface. None of the references teach or suggest

all of the limitations of claims 16-21. Accordingly, Applicants respectfully request that claims 16-21 be allowed.

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By: Lisa Bongiovi

Lisa A. Bongiovi

Registration No. 48,933

Confirmation No. 9014

CANTOR COLBURN LLP

55 Griffin Road South

Bloomfield, CT 06002

Telephone (860) 286-2929

Facsimile (860) 286-0115

Customer No. 23413

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